CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 96-218

WASTE DISCHARGE REQUIREMENTS
FOR
YUBA-SUTTER DISPOSAL, INC.
OSTROM ROAD SANITARY LANDFILL
CLASS II LANDFILL
YUBA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds that:

1. Yuba-Sutter Disposal, Inc. (hereafter Discharger) owns and operates Ostrom Road Sanitary Landfill. Yuba-Sutter Disposal, Inc. is a wholly owned subsidiary of Norcal Waste Systems, Inc. The facility was previously regulated by Waste Discharge Requirements (WDRs) Order No. 94-306 in conformance with Title 23, California Code of Regulations (CCR), Division 3 Chapter 15 (hereafter Chapter 15). The Discharger submitted a Report of Waste Discharge, dated 23 January 1996, for reclassification of the site from a Class III Landfill to a Class II Landfill. These WDRs combine information from Order No. 94-306, the Report of Waste Discharge, and Revisions to Monitoring and Reporting Program report, dated 29 March 1996.

2. The 261-acre facility is comprised of Assessor's Parcel Number 15-08-17. Waste disposal activities are currently proposed for 221 acres of the facility. The facility is 6 miles east of State Route 65 and borders the Beale Air Force Base south boundary, in Sections 10, 11, 14, 15, Township 14N, Range 5E, MDB&M, as shown in Attachment A, which is incorporated herein and made part of this Order.

3. The landfill consists of 2 modules, with four cells each, to be filled sequentially, as shown in Attachment B, which is incorporated herein and made part of this Order.

WASTES AND THEIR CLASSIFICATION

4. The Discharger proposes to discharge municipal solid waste and designated waste for disposal in the Class II Landfill Unit. These wastes are classified as 'nonhazardous solid waste', 'inert waste' and 'designated waste' using the criteria set forth in Chapter 15.

5. The Discharger proposes to discharge wastes containing greater than one percent (>1%) friable asbestos, which is a hazardous material. However, because these wastes do not pose a threat to ground water quality, Section 25143.7 of the Health and Safety Code permits their disposal in any landfill which has WDRs that specifically permit the discharge

provided that the wastes are handled and disposed of in accordance with other applicable state and federal statutes and regulations.

SITE DESCRIPTION

6. The facility is on a broad regional slope that rises gently toward the base of the Sierra Nevada Mountain Range, about 5 miles to the east. The site lies within the Best Slough drainage area. Best Slough is tributary to Dry Creek, which is tributary to Bear River, which is tributary to the Feather River.

7. Land within 1000 feet of the facility is used for Beale Air Force Base on the north and agriculture on the east, west, and south.

8. The site is within an alluvial plain, which is dissected by several streams, including Dry Creek and the Yuba River.

9. The site is underlain by Victor Formation sediments of Pleistocene Age. The Victor Formation is about 100 feet thick and consists of layers and lenses of sands, silt and clay. These layers dip at a one degree angle to the southwest.

10. A maximum credible earthquake from the Foothills Fault System, at a minimum distance of 8 km, is estimated to have Richter magnitude of 6.5 and would produce a mean peak ground acceleration of 0.33g at the site.

11. The first water-bearing zone beneath the site is found at an elevation of 42 feet above mean sea level (MSL) in the western portion of the site, at about 60 feet MSL in the central portion of the site, and at about 83 feet MSL in the eastern portion of the site. The general direction of ground-water flow is from east to west.

12. The soil underlying the site is generally fine grained and contains significant quantities of clay. The permeability of this material ranged from 1.0×10^{-7} to 3.7×10^{-8} centimeters per second. The vertical migration of ground water from the ground surface is restricted by a shallow "hardpan" layer upon which seasonal runoff is perched.

13. The beneficial uses of ground water are municipal and domestic supply, agricultural irrigation, stock watering, and industrial process supply.

14. The facility receives an average of 21 inches of precipitation per year as indicated on the isohyetal map from the U.S. Department of the Interior, Geological Survey, Water Resources Division, "Mean Annual Precipitation in the California Region," Menlo Park, California, 1969. The mean annual Pan A evaporation for this facility is 55.63 inches as measured at the Marysville Station between the years 1949 and 1953.

15. The probable maximum 24-hour precipitation event is 12.49 inches. The facility is adjacent but not within a 100-year floodplain.

16. Surface drainage is to the south towards Best Slough, an overflow of Dry Creek, which flows back into Dry Creek.

17. The beneficial uses of these surface waters are municipal and domestic supply, agricultural irrigation supply, stock watering, hydroelectric power generation, recreation, freshwater habitat, fish migration and spawning, wildlife habitat, ground water recharge, fresh water replenishment, preservation of rare and endangered species, and esthetic enjoyment.

FACILITIES OPERATION

18. Disposal operations will use a lift placement method. The refuse will be placed in lifts about 10 feet thick. Areas that do not receive waste additional waste within 180 days will be covered with a one foot soil layer.

19. The Discharger's current plans indicate that the landfill will reach capacity in about 35 years. The total capacity of this landfill is almost 14 million cubic yards (cy). The area served by the landfill is primarily Yuba and Sutter Counties and their incorporated cities, and surrounding communities.

20. The Discharger submitted a Leachate Management and Disposal Plan, dated 12 August 1993. The Discharger proposes to pump leachate from the landfill sumps to tank trucks. The tank trucks will transport the leachate to the City of Marysville wastewater treatment plant.

WASTE MANAGEMENT UNIT DESIGN

Landfill

21. The landfill has a composite liner, overlain by an approved leachate collection and removal system (LCRS), and other features as required by Chapter 15 and Federal RCRA Subtitle D.

CEQA AND OTHER CONSIDERATIONS

22. Yuba County adopted a Negative Declaration on 9 July 1996 for the proposed project, in accordance with the provisions of the California Environmental Quality Act, (Public Resources Code, Section 21000, et seq.). The Negative Declaration found no significant impacts to water quality. The Board has reviewed and concurs with this finding.

23. On 9 October 1991, the United States Environmental Protection Agency (EPA) promulgated regulations (Title 40, Code of Federal Regulations, Parts 257 and 258, "federal MSW regulations" or "Subtitle D") that apply, in California, to dischargers who own or operate landfills at which MSW is discharged. The majority of the federal MSW regulations became effective on the "Federal Deadline", 9 October 1993.

24. This order implements:

    a. the Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin, Third Edition;
    b. The prescriptive standards and performance goals of Chapter 15, Division 3, Title 23 of the California Code of Regulations, effective 27 November 1984, and subsequent revisions;
    c. The prescriptive standards and performance criteria of Part 258, Title 40 of the Code of Federal Regulations, Subtitle D of the Resource Conservation and Recovery Act; and
    d. State Water Resources Control Board Resolution No. 93-62, Policy for Regulation of Discharges of Municipal Solid Waste, adopted 17 June 1993.

PROCEDURAL REQUIREMENTS

25. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this site for the discharges of waste to land stated herein.

26. The Board has notified the Discharger and interested agencies and persons of its intention to update the WDRs for this facility.

27. In a public hearing, the Board heard and considered all comments pertaining to this facility and discharge.

IT IS HEREBY ORDERED that Order No. 94-306 is rescinded and it is further ordered that Yuba-Sutter Disposal, Inc. and its agents, successors and assignees, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of 'hazardous waste' at this facility, except for waste that is hazardous due only to its friable asbestos content, is prohibited. For the purposes of this Order, the terms 'hazardous waste' are as defined in Chapter 15.

2. Discharges of waste to either a landfill unit that has not received wastes or to a lateral expansion of a landfill unit are prohibited, unless the discharge is to an area equipped with a containment system which meets requirements in **B. Specifications**, below.

3. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to the landfill units, except for dewatered sewage or water treatment sludge as provided in Section 2523(c) of Chapter 15, is prohibited.

4. The discharge to the landfill unit of solid waste containing free liquid or moisture in excess of the waste's moisture holding capacity is prohibited.

5. The discharge of solid or liquid waste or leachate to surface waters, surface water drainage courses, or ground water is prohibited.

6. The discharge of storm water from daily, intermediate, or final cover soils containing designated wastes or sewage sludge in the uppermost 6 inches, to surface water, surface water drainage courses, or ground water is prohibited.

7. The discharge of biohazardous and /or biomedical waste, and radioactive waste is prohibited.

8. The disposal of containerized liquids at this facility is prohibited.

9. The discharge of waste to ponded water from any source is prohibited.

10. The discharge of waste within 100 feet of surface waters is prohibited.

11. The discharge of fuel products or cleaning solvents to the ground or surface waters is prohibited.

12. The discharge of wastes which have the potential to reduce or impair the integrity of containment structures or which, if commingled with other wastes in the unit, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reaction products which in turn:

    a. require a higher level of containment than provided by the unit,
    b. are restricted hazardous wastes, or
    c. impair the integrity of containment structures,

    is prohibited.

B. DISCHARGE SPECIFICATIONS

General Specifications

1. Wastes shall only be discharged into, and shall be confined to, the landfill modules specifically designed for their containment.

2. A minimum separation of 5 feet shall be maintained between wastes or leachates and the highest anticipated elevation of underlying ground water including the capillary fringe.

3. Prior to the discharge of waste to a landfill, all wells within 500 feet of the unit shall have sanitary seals which meet the requirements of the Yuba County Health Department or shall be properly abandoned. A record of the sealing and/or abandonment of such wells shall be sent to the Board and to the State Department of Water Resources.

4. Leachate shall be discharged to tank trucks and transported to the City of Marysville wastewater treatment plant. Leachate pretreatment shall be performed, as required by the City of Marysville, prior to discharge to the wastewater treatment plant.

5. Leachate generation by a landfill module leachate collection and removal system (LCRS) shall not exceed 85% of the design capacity of the sump pump. If leachate generation exceeds this value or if the depth of fluid in an LCRS exceeds the minimum needed for safe pump operation, then the Discharger shall immediately cease the discharge of sludges and other high-moisture wastes to the landfill module and shall notify the Board in writing within seven days. Notification shall include a time table for remedial or corrective action necessary to reduce leachate production.

6. For each landfill module, no waste shall be discharged until analytical data is obtained from quarterly sampling of all that module's background monitoring points for a period of one year. Also, background soil-pore liquid data shall be collected from beneath the unit before the composite liner is constructed. This data is necessary for selecting the appropriate statistical methods pursuant to § 2550.7(e)(7), (e)(8), (e)(9) and for establishing the background values specified pursuant to § 2550.7(e)(11) of Chapter 15.

General Waste Management Unit Construction

7. Clay liners shall have a maximum hydraulic conductivity of 1×10^{-7} cm/sec and a minimum relative compaction of 90%. Landfill final covers shall have a maximum hydraulic conductivity of 1×10^{-6} cm/sec and a minimum relative compaction of 90%. Hydraulic conductivities of liner materials shall be determined by laboratory tests using solutions with similar properties as the fluids that will be contained. Hydraulic conductivities of cover materials shall be determined by laboratory tests using water. Hydraulic conductivities determined through laboratory methods shall be confirmed by field testing in accordance with the Standard Provisions and Reporting Requirements described in Provision D.1.

8. LCRSs shall be designed, constructed, and maintained to collect twice the anticipated daily volume of leachate generated by the landfill and to prevent the buildup of hydraulic head on the underlying liner at any time. The depth of fluid in any LCRS sump shall be kept at or just above the minimum needed to ensure safe pump operation.

9. Any landfill liner or cover constructed after the effective date of this Order shall be designed and constructed in accordance with Chapter 15 and this Order and approved by Board staff prior to operation. Prior to the beginning of construction of any landfill liner or cover, a final design report shall be submitted to the Board for review and approval and include, but not be limited to, the engineered design plans for the landfill, the contract specifications, a construction quality assurance (CQA) plan to verify that construction specifications will be met, and a revised water quality monitoring plan. A CQA test pad report with a written summary of the test pad construction procedures and CQA program for the test pad shall be submitted with all test results, analyses, copies of the third party CQA inspector's field notes, and a certification that the test pad was constructed in accordance with the design plans, procedures and methods that will be used in the construction of the clay liner or cover. The test pad report should discuss correlation of field and laboratory test results and recommend field construction parameters for the clay liner or cover. This report must be reviewed and approved prior to the beginning of construction for the clay liner or cover. Approval of the final design report shall be obtained from Board staff prior to construction of the landfill liner or cover. A final construction report shall be submitted for approval by Board staff after each phase of construction and prior to the discharge of waste into the constructed phase. The final construction report shall include, but not be limited to, as-built plans for the landfill, a CQA report with a written summary of the CQA program and all test results, analyses, and copies of the inspector's original field notes, and a certification as described in the Standard Provisions and Reporting Requirements.

Landfill Specifications

10. All containment systems shall either: (1) include a composite liner which consists of an upper synthetic flexible membrane component (synthetic liner or SL) and a lower component of soil. The SL shall be at least 40-mils thick (or at least 60-mils thick if high density polyethylene) and shall be installed in direct and uniform contact with the underlying compacted soil component. The lower component shall be compacted soil that is at least two feet thick and that has an hydraulic conductivity of no more than 1×10^{-7} cm/sec.

11. The landfill shall be designed and constructed for a maximum credible earthquake and 1,000-year, 24-hour storm event.

12. The landfill shall not be located in wetlands unless the Discharger has successfully completed, and the Board has approved, all demonstrations required for such discharge under 40 CFR 258.12(a).

Protection from Storm Events

13. Precipitation and drainage control systems shall be designed, constructed, and maintained to accommodate the anticipated volume of precipitation and peak flows from surface runoff under 1000-year, 24-hour precipitation conditions.

14. Modules shall be designed, constructed, and operated in compliance with precipitation and flood conditions contained in the Standard Provisions and Reporting Requirements referenced in Provision D.1 below.

15. Annually, prior to the anticipated rainy season, any necessary erosion control measures shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the site and to prevent surface drainage from contacting or percolating through wastes.

Landfill Closure Specifications

16. At closure, each landfill module shall receive a final cover which is designed and constructed to function with minimum maintenance and consists, at a minimum, of a two-foot thick foundation layer (which may contain waste materials), overlain by a one-foot thick clay barrier, and topped by a one-foot thick vegetative soil layer. The compositely lined Class II landfill shall have a composite barrier with a permeability providing equivalent protection as the landfill liner system.

17. Vegetation shall be planted and maintained over each closed landfill module. Vegetation shall be selected to require a minimum of irrigation and maintenance and shall have a rooting depth not in excess of the vegetative layer thickness.

18. Closed landfill modules shall be graded to at least a three-percent (3%) grade and maintained to prevent ponding.

C. RECEIVING WATER LIMITATIONS

Water Quality Protection Standards

The concentrations of Constituents of Concern in waters passing through the Points of Compliance shall not exceed the Concentration Limits established pursuant to Monitoring and Reporting Program No. 96-218, which is attached to and made part of this Order.

D. PROVISIONS

1. The Discharger shall comply with the Standard Provisions and Reporting Requirements, dated September 1993, (hereafter Standard Provisions) which are hereby incorporated into this Order. The Standard Provisions contain important provisions and requirements with which the Discharger must comply. A violation of any of the Standard Provisions is a violation of these waste discharge requirements.

2. The Discharger shall submit a waste exclusion plan for the exclusion of Hazardous Waste to the landfill. The waste exclusion plan shall be submitted to the Board for approval prior to acceptance of "designated" wastes.

3. The Discharger shall comply with Monitoring and Reporting Program No. 96-218, which is attached to and made part of this Order. This compliance includes, but is not limited to, maintenance of waste containment facilities and precipitation and drainage controls and monitoring ground water, leachate from the landfill unit, the vadose zone and surface waters, throughout the active life of the waste management units and the post-closure maintenance period. A violation of Monitoring and Reporting Program No. 96-218 is a violation of these waste discharge requirements.

4. The Discharger shall maintain legible records of the volume and type of waste discharged at the landfill and the manner and location of discharge. Such records shall be maintained at the facility until the beginning of the post-closure maintenance period. These records shall be available for review by representatives of the Board and of the State Water Resources Control Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Board.

5. The Discharger shall provide proof to the Board **within sixty days after completing final closure** that the deed to the landfill facility property, or some other instrument

that is normally examined during title search, has been modified to include, in perpetuity, a notation to any potential purchaser of the property stating that:

a. the parcel has been used as a municipal solid waste landfill (MSWLF);

b. and use options for the parcel are restricted in accordance with the post-closure land uses set forth in the post-closure plan and in WDRs for the landfill; and

c. in the event that the Discharger defaults on carrying out either the post-closure maintenance plan or any corrective action needed to address a release, then the responsibility for carrying out such work falls to the property owner.

6. The Discharger shall maintain waste containment facilities and precipitation and drainage controls, and shall continue to monitor ground water, leachate from the landfill unit, the vadose zone, and surface waters per Monitoring and Reporting Program No. 96-218 throughout the post-closure maintenance period.

7. The post-closure maintenance period shall continue until the Board determines that remaining wastes in the landfill will not threaten water quality.

8. The Discharger shall comply with all applicable provisions of Chapter 15 that are not specifically referred to in this Order.

9. The Board will review this Order periodically and will revise these requirements when necessary.

E. REPORTING REQUIREMENTS

1. In the event of any change of ownership of this disposal site, the Discharger shall notify the succeeding owner or operator, in writing, of the existence of this Order. A copy of that notification shall be sent to the Board.

2. The Discharger shall comply with the reporting requirements specified in this Order, in Monitoring and Reporting Program Order No. 96-218 and in the Standard Provisions.

3. The Discharger shall submit a closure and post-closure maintenance plan (or suitable modifications to a pre-existing plan), that complies with 40 CFR 258.60 and 258.61, with Article 8 of Chapter 15, and with Title 14 of the CCR.

4. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with Monitoring and Reporting Program No. 96-218, as required by Section 13750 through 13755 of the California Water Code.

5. The Discharger shall submit a status report regarding the financial assurances for corrective action and closure every 5 years after the date of adoption of these requirements that either validates the ongoing viability of the financial instrument or proposes and substantiates any needed changes.

6. The Discharger shall notify the Board in writing of any proposed change in ownership or responsibility for construction or operation of the landfill. The Discharger shall notify the succeeding owner or operator in writing of the existence of this Order. A copy of that notification shall be sent to the Board.

I, WILLIAM H. CROOKS, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 9 August 1996.

WILLIAM H. CROOKS, Executive Officer

Attachments

WJM/NMC/PWM/njs

AMENDED
9 August 1996

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 96-218

FOR
YUBA-SUTTER DISPOSAL, INC.
OSTROM ROAD SANITARY LANDFILL
CLASS II LANDFILL
YUBA COUNTY

This is a Detection Monitoring Program under which the Discharger shall install water quality monitoring systems that are appropriate for detection monitoring and that comply with the provisions of California Code of Regulations, Title 23, Division 3, Chapter 15, Article 5, Section 2550.7.

Compliance with this Monitoring and Reporting Program, and with the companion Standard Provisions and Reporting Requirements, is ordered by Waste Discharge Requirements Order No. 96-218. Failure to comply with this Program, or with the Standard Provisions and Reporting Requirements, constitutes noncompliance with the WDRs and with the Water Code, which can result in the imposition of civil monetary liability.

REPORTING

The Discharger shall report monitoring data and information as required in this Monitoring and Reporting Program and as required in the Standard Provisions and Reporting Requirements. Reports which do not comply with the required format will be **REJECTED** and the Discharger shall be deemed to be in noncompliance with the WDRs. In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or the lack thereof. Historical and current monitoring data shall be graphed at least once annually. Graphs for the same constituent shall be plotted at the same scale to facilitate visual comparison of monitoring data. A short discussion of the monitoring results, including notations of any water quality violations shall precede the tabular summaries.

Field and laboratory tests shall be reported in the quarterly monitoring reports. Quarterly monitoring reports shall be submitted to the Board by the **15th day of the month** following the calendar quarter in which the samples were taken. The results of any monitoring done more frequently than required at the locations specified herein shall be reported to the Board. An annual report shall be submitted to the Board which contains both tabular and graphical summaries of the monitoring data obtained during the previous year.

Method detection limits and practical quantitation limits shall be reported. All peaks shall be reported, including those which cannot be quantified and/or specifically identified. Metals shall be analyzed according to the methods listed in Attachment D.

B. REQUIRED MONITORING REPORTS

1. Water Quality Protection Standard Report

The Discharger submitted an *"Article 5 Monitoring Program and Financial Assurance Provisions* " dated November 1992 and a *"Water Quality Protection Standard"* report dated 30 June 1994. Any changes to the water quality protection standard shall be described in the annual monitoring report.

2. Detection Monitoring Report

The Discharger shall submit reports of the results of detection monitoring in accordance with the schedules specified in this Monitoring and Reporting Program.

3. Annual Monitoring Summary Report

The Discharger shall submit the Annual Monitoring Summary Report as specified in the Standard Provisions and Reporting Requirements.

4. Constituents-of-Concern (COC) 5 Year Report

The Discharger shall submit reports of the results of ground water monitoring for the Constituents of Concern every 5 years, or more frequently if required. The ground water monitoring for COC Report shall alternate between the fall and spring seasons. The COC Report may be combined with a Detection Monitoring Report or an Annual Summary Report having a Reporting Period that ends at the same time.

5. Constituents-of-Concern (COC) Leachate Detection Report

The Discharger shall report to the Board by no later than 31 January of a given year the analytical results of the leachate sample taken the previous fall, including an identification of all detected COCs in Attachment D that are not on the landfill's COC list (non-COCs).

During any year in which a spring leachate retest is performed, the Discharger shall submit a report to the Board, by no later than 31 July of that year, identifying all constituents which must be added to the landfill's COC list as a result of having been detected in both the

(previous calendar year's) fall sample and in the spring retest sample. The parameters shall include volatile organic compounds.

Standard Observations

Each monitoring report shall include a summary and certification of completion of all Standard Observations for the landfill, for the perimeter of the landfill, and for the receiving waters. The standard observations shall be performed on a weekly basis and shall include those elements as defined in the Standard Provisions and Reporting Requirements.

C. MONITORING

If the Discharger, through a detection monitoring program, or the Board finds that there is a statistically significant increase in indicator parameters or waste constituents over the water quality protection standards (established pursuant to Monitoring and Reporting Program No. 96-218) at or beyond the Points of Compliance, the Discharger shall notify the Board or acknowledge the Board's finding in writing within seven days, and shall immediately resample for the constituent(s) or parameter(s) at the point where the standard was exceeded. Within 90 days, the Discharger shall submit to the Board the results of the resampling and either:

a. a report demonstrating that the water quality protection standard was not, in fact, exceeded; or

b. an amended Report of Waste Discharge for the establishment of a verification monitoring program, per Section 2557 of Chapter 15, which is designed to verify that water quality protection standards have been exceeded and to determine the horizontal and vertical extent of pollution.

If the Discharger, through an evaluation monitoring program, or the Board verifies that water quality protection standards have been exceeded at or beyond the Points of Compliance, the Discharger shall notify the Board or acknowledge the Board's finding in writing within seven days. Within 180 days, the Discharger shall submit to the Board an amended Report of Waste Discharge for the establishment of a corrective action program, per Section 2558 of Chapter 15, which is designed to achieve compliance with the water quality protection standards.

D. REQUIRED MONITORING PROGRAMS

1. Solid Waste Monitoring Program

Nonhazardous Solid Waste Monitoring

The Discharger shall monitor all wastes discharged to the Class III landfill modules on a monthly basis and report to the Board as follows:

Parameter	Units	Reporting Frequency
Quantity discharged	cubic yards or tons	Quarterly
Type of material discharged	---	Quarterly
Source(s) of material discharged	---	Quarterly
Minimum elevation of discharge	feet & tenths MSL	Quarterly
Capacity of landfill/module remaining	percent	Annually

2. Detection Monitoring Program

For each monitored medium, all Monitoring Points assigned to detection monitoring, and all Background Monitoring points shall be monitored once each calendar quarter for the Monitoring Parameters listed in this Program.

For any given monitored medium, a sufficient number of samples shall be taken from all Monitoring Points and Background Monitoring Points to satisfy the data analysis requirements for a given Reporting Period, and shall be taken in a manner that ensures sample independence to the greatest extent feasible.

Ground water sampling shall also include an accurate determination of the ground water surface elevation and field parameters (pH, temperature, electrical conductivity, turbidity) for that Monitoring Point or Background Monitoring Point. Ground water elevations taken prior to purging the well and sampling for Monitoring Parameters shall be used to fulfill the ground water gradient/direction analyses required. For each monitored ground water body, the Discharger shall measure the water level in each well and determine ground water gradient and direction at least quarterly, including the times of expected highest and lowest elevations of the water level for the respective ground water body. Ground water elevations for all background and downgradient wells for a given ground water body shall be measured within a period of time short enough to avoid temporal variations in ground water flow

which could preclude accurate determination of ground water gradient and direction. This information shall be included in the quarterly monitoring reports.

Statistical or non-statistical analysis should be performed as soon as the monitoring data are available.

3. Leachate Monitoring Program

All landfill modules and leachate collection and removal systems (LCRS) sumps shall be inspected weekly for leachate generation. Upon detection of leachate in a previously dry LCRS, the Discharger shall immediately sample the leachate and shall continue to sample and report the leachate at the frequencies listed in Table I thereafter. Leachate monitoring will be incorporated into all future expansions at the landfill.

All LCRSs shall be tested annually to demonstrate operation in conformance with waste discharge requirements. The results of these tests shall be reported to the Board and shall include comparison with earlier tests made under comparable conditions. All visible portions of synthetic liners shall be inspected on a quarterly basis and their condition reported quarterly to the Board.

TABLE I - LEACHATE MONITORING PROGRAM

Parameter	Units	Frequency
Field Parameters		
Total Flow	gallons	Monthly
Flow Rate	gallons/day	Monthly
Specific Conductance	μmhos/cm	Monthly
pH	number	Monthly
Monitoring Parameters		
Total Dissolved Solids (TDS)	mg/l	Quarterly
Chloride	mg/l	Quarterly
Sulfate	mg/l	Quarterly
Nitrate - Nitrogen	mg/l	Quarterly
Constituents of Concern		
Total Organic Carbon	mg/l	Annually
Carbonate	mg/l	Annually
Bicarbonate Alkalinity	mg/l	Annually
Total Alkalinity	mg/l	Annually
Volatile Organic Compounds (EPA Method 8260, see Attachment D	μg/l	Annually
Semi-Volatile Organic Compounds (EPA Method 8270, see Attachment D	μg/l	Annually
Organochlorine Pesticide, PCBs (EPA Method 8080)	μg/l	Annually
Chlorophenoxy Herbicides (EPA Method 8150)	μg/l	Annually
Organophosphorus Compounds (EPA Method 8140)	μg/l	Annually
Inorganics (dissolved) (See Attachment D for Method)	mg/l	Annually

4. Ground Water Monitoring

Field and laboratory tests shall be reported in the quarterly monitoring reports. All Monitoring Parameters shall be graphed so as to show historical trends at each well.

The ground water surface elevation (in feet and hundredths, M.S.L.) in all wells shall be measured on a quarterly basis and used to determine the velocity and direction of ground water flow. This information shall be displayed on a water table contour map and/or ground water flow net for the site and submitted with the quarterly monitoring reports.

The monitoring network shall consist of monitoring wells MW-1 through MW-5. Wells MW-1, MW-2, and MW-3 are background monitoring wells and MW-4 and MW-5 are downgradient wells. The Discharger shall propose a new well, MW-6, to be located at the western edge (directly downgradient) of the existing active WMU. Locations of these wells are shown on Attachment B. Any additional monitoring wells constructed at the site shall be added to the monitoring network. Samples shall be collected from all installed wells at the frequency and for the parameters specified in Table II. Background monitoring wells (MW-1, MW-2, and MW-3) shall be monitored for Field Parameters (with the exception of groundwater elevation) and Monitoring Parameters on a semi-annual basis.

5. Surface Water Monitoring

Surface water shall be sampled where surface water begins to flow past the waste management facility at monitoring point SW-1 (background), and downstream of the site at monitoring point SW-2, as shown in Attachment B. Surface water samples are to be collected after the first storm of the rainy season which produces significant flow and quarterly thereafter when water is present. Samples shall be collected from all stations and analyzed at the frequency and for the monitoring parameters specified in Table III.

Surface water monitoring reports shall be submitted with the corresponding quarterly ground water monitoring and shall include evaluation of potential impacts of the facility on surface water quality and compliance with the Water Quality Protection Standard.

TABLE II - GROUND WATER MONITORING PROGRAM

Parameter	Units	Frequency
Field Parameters		
Temperature	°C	Quarterly
Ground Water Elevation	Ft. & hundredths, MSL	Quarterly
Specific Conductance	μmhos/cm	Quarterly
pH	number	Quarterly
Turbidity	Turbidity units	Quarterly
Monitoring Parameters		
Total Dissolved Solids (TDS)	mg/l	Quarterly
Chloride	mg/l	Quarterly
Sulfate	mg/l	Quarterly
Nitrate - Nitrogen	mg/l	Quarterly
Volatile Organic Compounds (EPA Method 8260, See Attachment C)	μg/l	Quarterly
Constituents of Concern		
Total Organic Carbon	mg/l	5 years
Carbonate	mg/l	5 years
Bicarbonate Alkalinity	mg/l	5 years
Total Alkalinity	mg/l	5 years
Volatile Organic Compounds (EPA Method 8260, See Attachment D)	μg/l	5 years
Semi-Volatile Organic Compounds (EPA Method 8270)	μg/l	5 years
Organochlorine Pesticide, PCBs (EPA Method 8080)	μg/l	5 years
Chlorophenoxy Herbicides (EPA Method 8150)	μg/l	5 years
Organophosphorus Compounds (EPA Method 8140)	μg/l	5 years
Inorganics (dissolved) (See Attachment D for Method)	mg/l	5 years
Chemical Oxygen Demand	mg/l	5 years

TABLE III - SURFACE WATER MONITORING PROGRAM

Parameter	Units	Frequency
Field Parameters		
Temperature	°C	Quarterly
Specific Conductance	μmhos/cm	Quarterly
pH	number	Quarterly
Turbidity	Turbidity units	Quarterly
Monitoring Parameters		
Total Suspended Solids (TSS)	mg/l	Quarterly
Total Dissolved Solids (TDS)	mg/l	Quarterly
Chlorides	mg/l	Quarterly
Sulfates	mg/l	Quarterly
Nitrate - Nitrogen	mg/l	Quarterly
Constituents of Concern		
Total Organic Carbon	mg/l	5 years
Carbonate	mg/l	5 years
Bicarbonate Alkalinity	mg/l	5 years
Total Alkalinity	mg/l	5 years
Chemical Oxygen Demand	mg/l	5 years
Dissolved Oxygen	mg/l	5 years
Oil and Grease	mg/l	5 years
Inorganics(total recoverable metals) (See Attachment D for Method)	mg/l	5 years

6. Unsaturated Zone Monitoring

The unsaturated (vadose) zone monitoring network shall consist of "background" pressure lysimeter VZ-1 and pressure lysimeter VZ-2, which is the downgradient monitoring point. Unsaturated zone monitoring shall be incorporated into any expansion of the footprint after 9 October 1993. Soil-pore liquid samples shall be analyzed at the frequency and for the monitoring parameters specified in Table IV.

Unsaturated Zone monitoring reports shall be submitted with the corresponding quarterly ground water monitoring and shall include evaluation of potential impacts of the facility on the unsaturated zone and compliance with the Water Quality Protection Standard.

TABLE IV - UNSATURATED ZONE MONITORING PROGRAM

Parameter	Units	Frequency
Field Parameters		
Specific Conductance*	μmhos/cm	Quarterly
pH*	number	Quarterly
Monitoring Parameters		
Total Dissolved Solids (TDS)*	mg/l	Quarterly
Chloride*	mg/l	Quarterly
Sulfate*	mg/l	Quarterly
Nitrate - Nitrogen*	mg/l	Quarterly
Constituents of Concern		
Total Organic Carbon*	mg/l	5 years
Carbonate*	mg/l	5 years
Bicarbonate Alkalinity*	mg/l	5 years
Total Alkalinity*	mg/l	5 years
Volatile Organic Compounds* (EPA Method 8260)	μg/l	5 years
Semi-Volatile Organic Compounds (EPA Method 8270)	μg/l	5 years
Organochlorine Pesticide, PCBs (EPA Method 8080)	μg/l	5 years
Chlorophenoxy Herbicides (EPA Method 8150)	μg/l	5 years
Organophosphorus Compounds (EPA Method 8140)	μg/l	5 years
Inorganics (dissolved)* (See Attachment D for Method)	mg/l	5 years
Chemical Oxygen Demand	mg/l	5 years

* Concentration limits to be determined when sufficient data available.

E. WATER QUALITY PROTECTION STANDARD

The Water Quality Protection Standard (Standard) consists of the following elements:

Constituents of Concern;
Concentration Limits;
Monitoring Points;
Points of Compliance; and
Compliance Period.

Each of these is described as follows:

1. Constituents of Concern

The 'COC list' (list of Constituents of Concern required under 23 CCR 2550.3) shall include all constituents listed in Tables I, II, III and IV (above), the Waste Discharge Requirements Order No. 96-218 and all constituents listed in Attachment D. The Constituents of Concern shall be for water-bearing media (i.e., ground water and surface water). The Discharger shall monitor all COCs every five years under the detection monitoring program, or more frequently as required under evaluation monitoring. For each monitoring period, the Discharger shall determine whether there is statistically significant evidence of a release from the landfill and whether the landfill is in compliance with the Water Quality Protection Standard using procedures specified in Section 2550.7 of Chapter 15.

2. Concentration Limits

The Concentration Limit for any given Constituent of Concern or Monitoring Parameter in a given monitored medium (i.e., the uppermost aquifer) at a landfill shall be as follows, and shall be used as the basis of comparison with data from the Monitoring Points in that monitored medium:

a. The background value established in the Monitoring and Reporting Program for that constituent and medium;

b. The constituent's background value, established anew during each Reporting Period using only data from all samples collected during that Reporting Period from the Background Monitoring Points for that monitored medium. Either:

c. (1) The mean (or median, as appropriate) and standard deviation (or other measure of central tendency, as appropriate) of the constituent's background data; or

(2) The constituent's MDL, in cases where less than 10% of the background samples exceed the constituent's MDL; or

d. A concentration limit greater than background, as approved by the Board for use during or after corrective action.

Concentration limits for inorganic constituents were calculated using the tolerance interval method and the pooled historical analytical data for background wells MW-1, MW-2, and MW-3. Concentration limits for ground water and surface water are listed in Table V. Concentration limits for surface water and the unsaturated zone will be determined when sufficient data is available.

TABLE V - GROUND WATER AND SURFACE WATER CONCENTRATION LIMITS

Constituent	Units	MW-4,5,6	SW-2
Specific Conductance (EC)	µmhos/cm	467	455
pH	number	6.5 - 7.5	6.4 - 8.9
Total Dissolved Solids (TDS)	mg/l	317	309
Alkalinity, Bicarbonate	mg/l	184	196
Chloride	mg/l	21	16
Sulfate	mg/l	16	NE
Nitrate as N	mg/l	36	NE
Total Organic Carbon	mg/l	NE	16
Carbonate	mg/l	Detect	Detect
VOCs (EPA 8260 and 8270)	mg/l	Detect	Detect
Organochlorine Pesticide, PCB (EPA 8080)	mg/l	Detect	Detect
Chlorophenoxy Herbicides (EPA 8150)	mg/l	Detect	Detect
Organophosphorus Compounds (EPA 8140)	mg/l	Detect	Detect
Aluminum, dissolved	mg/l	0.139	1.5
Antimony, dissolved	mg/l	Detect	Detect
Arsenic, dissolved	mg/l	NE	0.002
Barium, dissolved	mg/l	0.029	0.033
Beryllium, dissolved	mg/l	Detect	Detect
Cadmium, dissolved	mg/l	NE	Detect
Chromium, dissolved	mg/l	Detect	Detect
Chromium VI+, dissolved	mg/l	Detect	NE[1]
Cobalt, dissolved	mg/l	Detect	NE[1]
Copper, dissolved	mg/l	NE	NE
Cyanide, dissolved	mg/l	Detect	Detect
Iron, dissolved	mg/l	NE	2.1
Lead, dissolved	mg/l	NE	NE
Manganese, dissolved	mg/l	0.068	NE
Mercury, dissolved	mg/l	Detect	Detect
Nickel, dissolved	mg/l	Detect	Detect
Selenium, dissolved	mg/l	Detect	Detect
Sulfide, dissolved	mg/l	Detect	Detect
Thallium, dissolved	mg/l	Detect	Detect
Tin, dissolved	mg/l	Detect	Detect
Vanadium, dissolved	mg/l	NE	NE
Zinc, dissolved	mg/l	0.033	NE
Chemical Oxygen Demand	mg/l	3.21	NE[1]

*NE--Because the alpha level (percent false positive rate) was greater than 5 percent, this limit could not be established.

*NE[1]--Not established because less than four samples were collected at this time.

3. Monitoring Points

Monitoring Points (including background) for ground water detection monitoring shall be those listed in this Monitoring and Reporting Program and shown on Attachment B.

Ground Water:	MW-1, MW-2, MW-3, MW-4, MW-5, and proposed well MW-6
Surface Water:	SW-1 and SW-2
Vadose Zone:	VZ-1, VZ-2, VZ-3, and VZ-4

4. Points of Compliance

The Points of Compliance shall be those listed in this Monitoring and Reporting Program and shown on Attachment B.

Ground Water:	MW-4, MW-5, and MW-6
Surface Water:	SW-2
Vadose Zone:	VZ-2, VZ-3, and VZ-4

5. Compliance Period

The Compliance period is the number of years equal to the active life of the landfill plus the closure period. Each time the Water Quality Protection Standard is exceeded (i.e., a release is discovered), the landfill begins a Compliance Period on the date the Board directs the Discharger to begin an Evaluation Monitoring Program. If the Discharger's Corrective Action Program (CAP) has not achieved compliance with the Standard by the scheduled end of the Compliance Period, the Compliance Period is automatically extended until the landfill has been in continuous compliance for at least three consecutive years.

The Discharger shall implement the above monitoring program on the effective date of this Order.

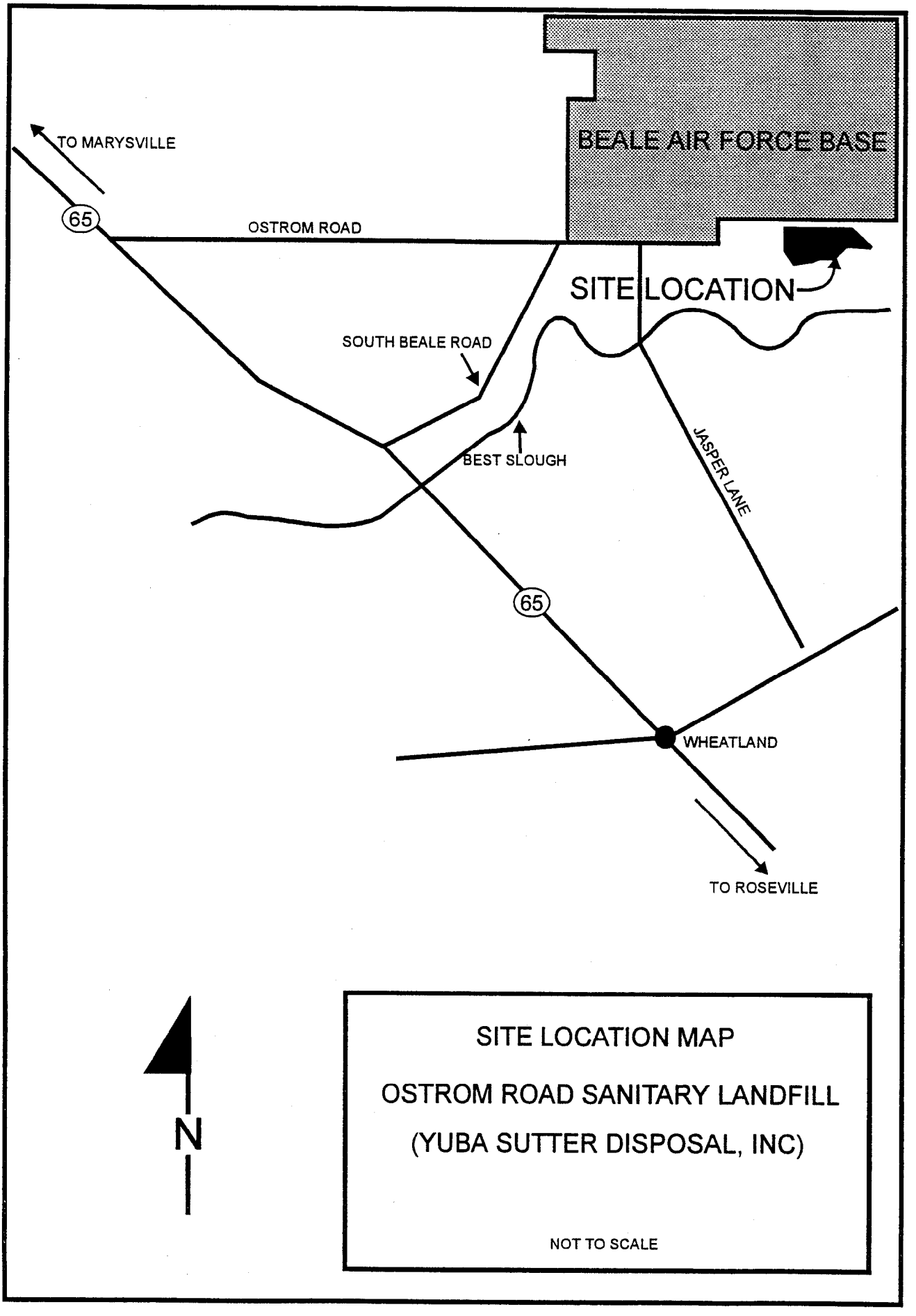
Ordered by: William H. Crooks
WILLIAM H. CROOKS, Executive Officer

9 August 1996
(Date)

Attachments
WJM/NMC/PWM/njs

AMENDED
9 August 1996

ATTACHMENT A



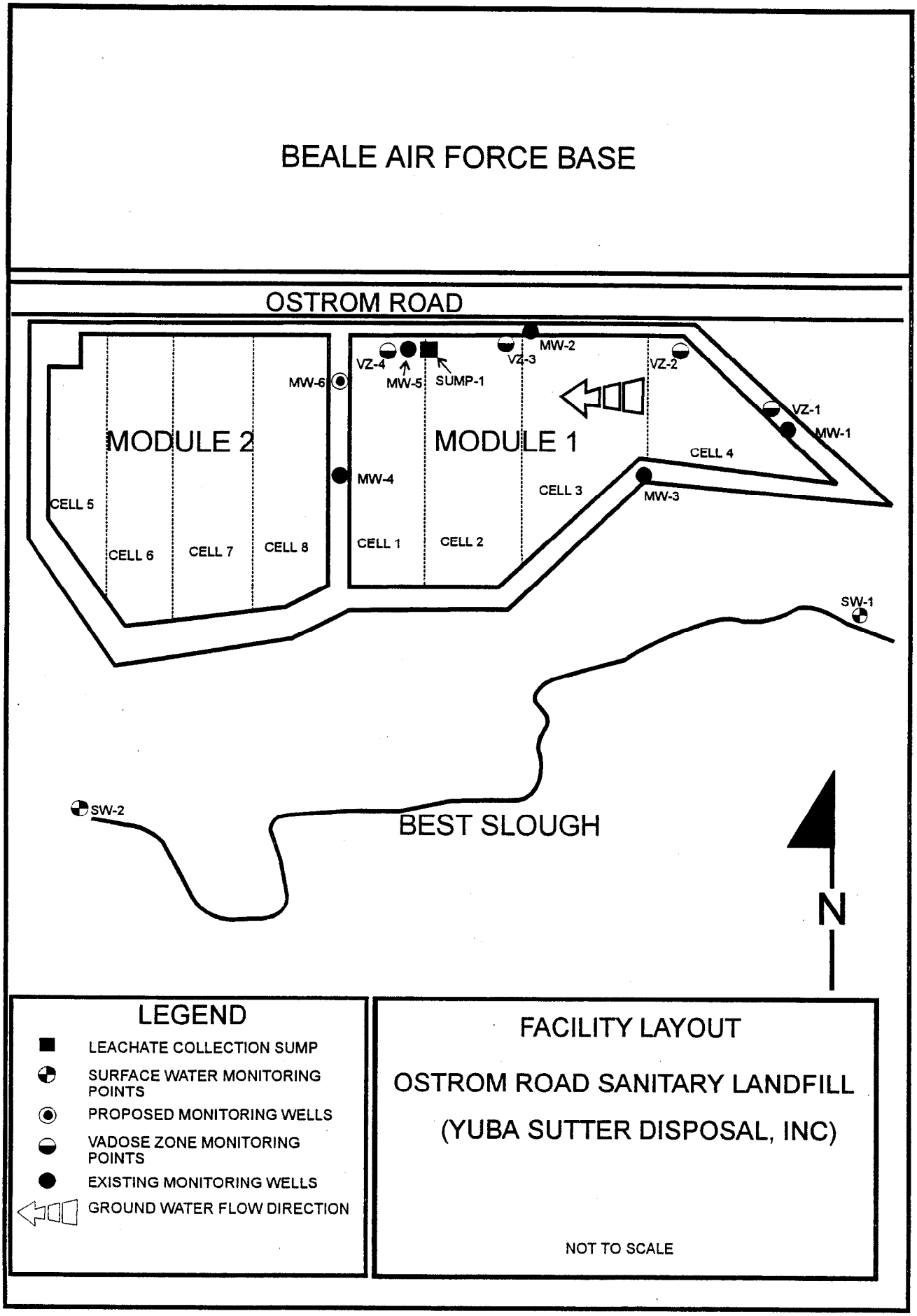
SITE LOCATION MAP

OSTROM ROAD SANITARY LANDFILL

(YUBA SUTTER DISPOSAL, INC)

NOT TO SCALE

ATTACHMENT B



WASTE DISCHARGE REQUIREMENTS
YUBA-SUTTER DISPOSAL INC.
OSTROM ROAD SANITARY LANDFILL
CLASS II LANDFILL
YUBA COUNTY

MONITORING PARAMETERS FOR DETECTION MONITORING

Surrogates for Metallic Constituents:

- pH
- Total Dissolved Solids
- Specific Conductivity
- Chloride
- Sulfate
- Nitrate nitrogen

Constituents included in VOC_{water} (by USEPA Method 8260):

- Acetone
- Acrylonitrile
- Benzene
- Bromochloromethane
- Bromodichloromethane
- Bromoform (Tribromomethane)
- Carbon disulfide
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane (Ethyl chloride)
- Chloroform (Trichloromethane)
- Dibromochloromethane (Chlorodibromomethane)
- 1,2-Dibromo-3-chloropropane (DBCP)
- 1,2-Dibromoethane (Ethylene dibromide; EDB)
- o-Dichlorobenzene (1,2-Dichlorobenzene)
- p-Dichlorobenzene (1,4-Dichlorobenzene)
- trans- 1,4-Dichloro-2-butene
- 1,1-Dichloroethane (Ethylidene chloride)
- 1,2-Dichloroethane (Ethylene dichloride)
- 1,1-Dichloroethylene (1,1-Dichloroethene; Vinylidene chloride)
- cis-1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
- trans-1,2-Dichloroethylene (trans-1,2-Dichloroethene)
- 1,2-Dichloropropane (Propylene dichloride)
- cis-1,3-Dichloropropene

trans-1,3-Dichloropropene
Ethylbenzene
2-Hexanone (Methyl butyl ketone)
Methyl bromide (Bromomethene)
Methyl chloride (Chloromethane)
Methylene bromide (Dibromomethane)
Methylene chloride (Dichloromethane)
Methyl ethyl ketone (MEK; 2-Butanone)
Methyl iodide (Iodomethane)
4-Methyl-2-pentanone (Methyl isobutylketone)
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene)
Toluene
1,1,1-Trichloethane (Methylchloroform)
1,1,2-Trichloroethane
Trichloroethylene (Trichloroethene)
Trichlorofluoromethane (CFC-11)
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride
Xylenes

WASTE DISCHARGE REQUIREMENTS
YUBA-SUTTER DISPOSAL, INC.
OSTROM ROAD SANITARY LANDFILL
CLASS II LANDFILL
YUBA COUNTY

CONSTITUENTS OF CONCERN & APPROVED USEPA ANALYTICAL METHODS

Inorganics (by USEPA Method):

Aluminum	6010
Antimony	6010
Barium	6010
Beryllium	6010
Cadmium	6010
Chromium	6010
Chromium VI[+]	7197
Cobalt	6010
Copper	6010
Iron	6010
Manganese	6010
Silver	6010
Tin	6010
Vanadium	6010
Zinc	6010
Arsenic	7061
Lead	7421
Mercury	7470
Nickel	7520
Selenium	7741
Thallium	7841
Cyanide	9010
Sulfide	9030

[1] Report all peaks identified by the EPA test methods. Ground water and leachate samples shall be analyzed and reported as dissolved. Surface water samples shall be analyzed and reported as total recoverable metals as specified in EPA-600/4-79-020 dated March 1993. Unsaturated zone water samples shall be analyzed and reported as totals.

Volatile Organics (USEPA Method 8260):

Acetone
Acetonitrile (Methyl cyanide) Acrolein
Acrylonitrile
Allyl chloride (3-Chloropropene) Benzene
Bis(2-ethylhexyl) phthalate
Bromo

Bromochloromethane (Chlorobromomethane)
dichloromethane (Dibromochloromethane)
Bromoform (Tribromomethane)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl chloride)
Chloroform (Trichloromethane)
Chloroprene
Dibromochloromethane (Chlorodibromomethane)
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (Ethylene dribromide; EDB)
o-Dichlorobenzene (1,2-Dichlorobenzene)
m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
trans- 1,4-Dichloro-2-butene
Dichlorodifluoromethane (CFC 12)
1,1-Dichloroethane (Ethylidene chloride)
1,2-Dichloroethane (Ethylene dichloride)
1,1-Dichloroethylene (1,1-Dichloroethene; Vinylidene chloride)
cis- 1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
trans- 1,2-Dichloroethylene (trans- 1,2-Dichloroethene)
1,2-Dichloropropane (Propylene dichloride)
1,3-Dichloropropane (Trimethylene dichloride)
2,2-Dichloropropane (Isopropylidene chloride)
1,1 -Dichloropropene
cis- 1 ,3-Dichloropropene
trans- 1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
2-Hexanone (Methyl butyl ketone)
Isobutyl alcohol
Isodrin
Methacrylonitrile
Methyl bromide (Bromomethane)
Methyl chloride (Chloromethane)
Methyl ethyl ketone (MEK; 2-Butanone)
Methyl iodide (Iodomethane)
Methyl methacrylate

4-Methyl-2-pentanone (Methyl isobutyl ketone)
Methylene bromide (Dibromomethane)
Methylene chloride (Dichloromethane)
Naphthalene
Propionitrile (Ethyl cyanide)
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene; PCE)
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane, Methylchloroform
1,1,2-Trichloroethane
Trichloroethylene (Trichloroethene; TCE)
Trichlorofluoromethane (CFC- 11)
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride (Chloroethene)
Xylene (total)

Semivolatile Organics (USEPA Method 8270 - base, neutral, & acid extractables):

Acenaphthene
Acenaphthylene
Acetophenone
2-Acetylaminofluorene (2-AAF)
Aldrin
4-Aminobiphenyl
Anthracene
Benzo[a]anthracene (Benzanthracene)
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Benzo[g,h,i]perylene
Benzo[a]pyrene
Benzyl alcohol
alpha-BHC
beta-BHC
delta-BHC
gamma-BHC (Lindane)
Bis(2-chloroethoxy)methane

Bis(2-chloroethyl) ether (Dichloroethyl ether)
Bis(2-chloro-1-methyethyl) ether (Bis(2-chloroisopropyl) ether; DCIP)
4-Bromophenyl phenyl ether
Butyl benzyl phthalate (Benzyl butyl phthalate)
Chlordane
p-Chloroaniline
Chlorobenzilate
p-Chloro-m-cresol (4-Chloro-3-methylphenol)
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl phenyl ether
Chrysene o-Cresol (2-methylphenol)
m-Cresol (3-methylphenol)
p-Cresol (4-methylphenol)
4,4'-DDD
4,4'-DDE
4,4'-DDT
Diallate
Dibenz[a,h]anthracene
Dibenzofuran
Di-n-butyl phthalate
o-Dichlorobenzene (1,2-Dichlorobenzene)
m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
3,3'-Dichlorobenzidine
2,4-Dichlorophenol
2,6-Dichlorophenol
Dieldrin
Diethyl phthalate
p-(Dimethylamino)azobenzene
7,12-Dimethylbenz[a]anthracene
3,3'-Dimethylbenzidine
2,4-Dimehtylphenol (m-Xylenol)
Dimethyl phthalate
m-Dinitrobenzene
4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene

Di-n-octyl phthalate
Diphenylamine
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Ethyl methacrylate
Ethyl methanesulfonate
Famphur
Fluoranthene
Fluorene
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Hexachloropropene
Indeno(1,2,3-c,d)pyrene
Isophorone
Isosafrole
Kepone
Methapyrilene
Methoxychlor
3-Methylcholanthrene
Methyl methanesulfonate
2-Methylnaphthalene
Naphthalene
1,4-Naphthoquinone
1-Naphthylamine
2-Naphthylamine
o-Nitroaniline (2-Nitroaniline)
m-Nitroaniline (3-Nitroaniline)
p-Nitroaniline (4-Nitroaniline)
Nitrobenzene
o-Nitrophenol (2-Nitrophenol)
p-Nitrophenol (4-Nitrophenol)
N-Nitrosodi-n-butylamine (Di-n-butylnitrosamine)

N-Nitrosodiethylamine (Diethylnitrosamine)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitrosodiphenylamine (Diphenylnitrosamine)
N-Nitrosodipropylamine (N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine)
N-Nitrosomethylethylamine (Methylethylnitrosamine)
N-Nitrosopiperidine
N-Nitrosospyrrolidine
5-Nitro-o-toluidine
Pentachlorobenzene
Pentachloronitrobenzene (PCNB)
Pentachlorophenol
Phenacetin
Phenanthrene
Phenol
p-Phenylenediamine
Polychlorinated biphenyls (PCBs; Aroclors)
Pronamide
Pyrene
Safrole
1,2,4,5-Tetrachlorobenzene
2,3,4,6-Tetrachlorophenol
o-Toluidine
Toxaphene
1,2,4-Trichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
0,0,0-Triethyl phosphorothioate
sym-Trinitrobenzene

Organophosphorus Compounds (USEPA Method 8140):

0,0-Diethyl 0-2-pyrazinyl phosphorothioate (Thionazin)
Dimethoate
Disulfoton
Methyl parathion (Parathion methyl)
Parathion
Phorate

Chlorinated Herbicides (USEPA Method 8150):

2,4-D (2,4-Dichlorophenoxyacetic acid)
Dinoseb (DNBP; 2-sec-Butyl-4,6-dinitrophenol)
Silvex (2,4,5-Trichlorophenoxypropionic acid; 2,4,5-TP)
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)

INFORMATION SHEET

YUBA-SUTTER DISPOSAL, INC.
OSTROM ROAD SANITARY LANDFILL
CLASS II LANDFILL, YUBA COUNTY

Ostrom Road Sanitary Landfill is a Class III landfill facility in southeastern Yuba County, on the southern property boundary of Beale Air Force Base. The facility is owned and operated by Yuba-Sutter Disposal, Inc. The landfill will be constructed with two modules in eight phases over an eight year period. Waste will be placed in eight cells, four cells in each module. The landfill will cover 221 acres and contain about 6,880,000 tons of waste when completed.

The Discharger proposes to reclassify the Class III Landfill as a Class II Landfill to include disposal of 'designated waste'.

The proposed containment system includes a composite liner system consisting of a clay barrier layer overlain by a synthetic membrane and a blanket leachate collection and removal system. Three leachate collection sumps are proposed on the north side of each module.

The proposed groundwater monitoring network consists of five wells, (MW-1 through MW-5) The Discharger is required to install an additional downgradient monitoring well, MW-6 at the western edge of the active waste management unit.

WJM/NMC/PWM/njs
rev. 12 July 1996